Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (currently amended) A system for transmitting data between a first modem and a second modem across a packet network with reduced bandwidth[[,]] and improved ~~resistence~~ resistance to network packet loss, comprising:

a first processor for connection between [[a]] said first modem and a first side of said packet network for:

demodulating ~~the~~ a full duplex data stream from said first modem into bits;

packetizing the bits into packets for transport over ~~an IP~~ said packet network; and

remodulating the full duplex data stream from a remote end, and

a second processor for connection between [[a]] said second modem and a second side of said packet network for:

providing a local interface to said second modem;

demodulating the full duplex data stream from said second modem into bits;

packetizing the bits into packets for transport over ~~an IP~~ said packet network; and

remodulating the full duplex data stream from said first ~~end~~ side,

wherein said packets include redundant data upon the network packet loss.

2.   (currently amended) The system of claim 1, further comprising:

means for establishing optimal modulation and rate parameters for ~~commination~~ communication between said first and second modems.

3.   (original) The system of claim 2, wherein said means for establishing optimal modulation

and rate parameters includes the exchange of signaling messages to determine the best commonly supported data rate.

4.   (original) The system of claim 3, wherein said means for establishing optimal modulation and rate parameters further includes:

means for independent connection of said first and second modems if no commonly supported data rate is determined.

5.   (currently amended) In a system wherein an originating modem terminal equipment ~~MTE~~ connects to ~~an intermediate~~ a digital network via an originating modem relay unit ~~MRU~~ and wherein a destination modem terminal equipment connects to the <u>digital</u> network via a destination modem relay unit, a method of providing modem communications comprising:

the originating modem terminating equipment sending <u>digital</u> data to the destination modem terminating equipment via the originating modem relay unit and the destination modem relay unit;

the originating modem relay unit sending the <u>digital</u> data to the destination modem relay unit; and

while the destination modem relay unit is waiting for <u>the digital</u> data from the originating modem terminating equipment, the destination modem relay unit maintaining communication with the destination modem terminating equipment to prevent protocol timeouts of the destination modem terminating equipment.

6.   (currently amended) The system of claim 5, wherein <u>each of</u> said <u>originating and said destination</u> modem relay ~~unit includes~~ <u>units include</u>:

a modem driver connected to ~~said digital network~~ <u>a modulated interface</u>,

a modem network driver connected to said ~~modem~~ <u>digital network</u>, and

a modem relay protocol unit, connected between said modem driver and said modem

network driver, ~~to maintain state and to format~~ <u>tracks</u> modem control and state machine functions <u>and provides</u> modem data ~~for said digital network~~.

7.   (currently amended) In a system wherein an originating modem terminal equipment connects to ~~an intermediate~~ <u>a</u> digital network via an originating modem relay unit and wherein a destination modem terminating equipment connects to the <u>digital</u> network via a destination modem relay unit, a method of receiving a modem communication ~~comprising, by~~ <u>from</u> the destination modem relay unit <u>comprises</u>:

        receiving <u>digital</u> data from the originating modem terminating equipment; and

        while waiting for <u>the digital</u> data from the originating modem terminating equipment, maintaining communication with the destination modem terminating equipment to prevent protocol timeouts of the destination modem terminating equipment[[,]]<u>.</u>

8.   (currently amended) A method of receiving a modem communication at a destination modem terminal equipment from an originating modem terminating equipment via ~~an intermediate~~ <u>a</u> digital network, wherein the destination modem terminating equipment connects to the <u>digital</u> network via a destination modem relay unit, the method comprising~~, by the destination modem relay unit~~:

        receiving<u>, by the destination modem relay unit,</u> <u>digital</u> data from the originating modem terminating equipment; and

        while waiting for <u>the digital</u> data from the originating modem terminating equipment, maintaining communication with said destination modem terminating equipment to prevent protocol timeouts of the destination modem terminating equipment.

9.   (currently amended) The method of claim 7 wherein the <u>digital</u> network ~~is of~~ <u>comprises</u> <u>one of an</u> unknown and unpredictable delay.

10.   (currently amended) A method for transmitting <u>data between a first</u> modem <u>and a second</u>

<u>modem</u> across a packet network with reduced bandwidth[[,]] and improved ~~resistence~~ <u>resistance</u>

to network packet loss, comprising:

      receiving a modem signal having a control portion and a data portion[[,]] from [[a]] <u>said</u>

first modem;

      separating said control portion ~~from~~ <u>and</u> said data portion;

      providing a control signal to said first modem [[as]] <u>at</u> a local interface;

      packetizing said data portion for transmission over said packet network to a second

modem<u>; and</u>

      <u>providing redundant data in a packet of said data portion upon the network packet loss</u>.

11.   (currently amended) The method of claim 10, further comprising:

      establishing optimal modulation and rate parameters for ~~commination~~ <u>communication</u>

between said first and second modems.

12.   (currently amended) The method of claim 10, further including:

      exchanging signaling messages to determine ~~the~~ <u>a</u> best commonly supported data rate.

13.   (currently amended) The ~~system~~ <u>method</u> of claim 12, further including:

      determining when no commonly supported data rate is available; and

      independently connecting said first and second modems if no commonly supported data

rate is determined.

14.   (currently amended) The ~~modem transport~~ method of claim 10, ~~further comprising the~~

~~step of:~~ <u>wherein said</u> providing <u>redundant</u> data ~~packets containing~~ <u>in a packet follows</u> a first

series of <u>data</u> packets ~~and a redundant series of data packets each series containing modem data,~~

<u>in which at least one of said first series of data packets is lost</u> across said packet network.

15.   (currently amended) The ~~modem transport~~ method of claim 14, wherein:

said ~~provisioning of~~ said redundant ~~series~~ <u>data</u> is delayed by a predetermined number of <u>data</u> packets ~~from said provisioning of~~ <u>following</u> said first series of <u>data</u> packets.

16.   (currently amended) The method of claim 15, wherein said data packets ~~are~~ <u>comprise</u> <u>digital</u> modem data.

17.   (original) The method of claim 15, wherein said delay is selected to accommodate expected packet loss and to provide acceptable delay.